REMARKS

The Office Action dated February 23, 2007 has been received and carefully noted. The following remarks are submitted as a full and complete response thereto. Claims 1-36 are submitted for reconsideration.

The Office Action indicated that claims 5, 10, 11, 16, 21, 22, 28, 33 and 34 would be allowable if rewritten in independent form. Applicant's representative thanks the Examiner for indicating the allowability of claims 5, 10, 11, 16, 21, 22, 28, 33 and 34. However, based on the arguments presented below, Applicant request fully submits that claims 5, 10, 11, 16, 21, 22, 28, 33 and 34 are allowable in the present form and requests that all of the pending claims be allowed.

Claims 1-4, 6-9, 12-15, 17-20, 24-27, 29-32 and 36 were rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,081,570 to Ghuman (hereinafter Ghuman) in view of U.S. Patent Publication No. 2001/0019958 to Delfs (hereinafter Delfs). According to the Office Action, Ghuman does not teach that the method is used to detect octet slips in pulse code modulation. Therefore, the Office Action combined the teachings of Ghuman and Delfs to yield all of the elements of claims 1-4, 6-9, 12-15, 17-20, 24-27, 29-32 and 36. The rejection is traversed as being based on references that neither teach nor suggest the novel combination of features clearly recited in claims 1-4, 6-9, 12-15, 17-20, 24-27, 29-32 and 36.

Claim 1, upon which claims 2-11 depend, recites a method for detecting an assumed octet slip in an inband signaling block in pulse code modulation. The method

includes choosing a searching direction and searching a first error bit k1 starting from a chosen end of a searching block. The method also includes counting a number of bit errors starting from said k1 bit in a slipped block and detecting octet slip by analyzing the error bits.

Claim 12, upon which claims 13-22 depend, recites a device for detecting an assumed octet slip in an inband signalling block in pulse code modulation, which device is connected to in path equipment, the system including a slip detector. The slip detector includes means for choosing a searching direction and a searcher arranged to search a first error bit k1 starting from a chosen end of a searching block. The slip detector also includes a counter arranged to count a number of bit errors starting from said k1 bit in a slipped block and a detector arranged to detect the octet slip by analyzing error bits.

Claim 23, upon which claims 24-36 depend, recites a system for detecting an assumed octet slip in an inband signalling block in pulse code modulation. The system includes a sender terminal, a receiver terminal, an in path equipment and a slip detector that is arranged to detect assumed octet slip.

As outlined below, the cited references of Ghuman and Delfs do not teach or suggest the all of the elements of the pending claims.

Ghuman discloses a parallel integrated frame synchronizer which implements a sequential pipeline process wherein serial data in the form of telemetry data or weather satellite data enters the synchronizer by means of a front-end subsystem and passes to a parallel correlator subsystem or a weather satellite data processing subsystem. When in a

CCSDS mode, data from the parallel correlator subsystem passes through a window subsystem, then to a data alignment subsystem and then to a bit transition density (BTD)/cyclical redundancy check (CRC) decoding subsystem. Data from the BTD/CRC decoding subsystem or data from the weather satellite data processing subsystem is then fed to an output subsystem where it is output from a data output port.

Ghuman further discloses the data flowchart shown in Figs. 19A and 19B. The first step in performing synchronization is to select the data source. If the input data is serial data or has been serialized, it is first synchronized to the system clock, then it is converted to parallel data and it is again synchronized to the system clock. The synchronized parallel data is then sent to the parallel correlator subsystem. Next, the number of parallel bytes of data are counted and stored. The synchronized parallel data is next subjected to a TIMEOUT determination. If a TIMEOUT sequence has been initiated and the clock count exceeds a set count, a TIMEOUT and FLUSH command is generated. If, on the other hand, the input data is parallel data or CPU data, it is sent to the parallel correlator subsystem, unless it is NRZ-M/S decoded, in which case it is decoded first before being sent to the parallel correlator subsystem. Parallel data is received from the front end subsystem in 8-bit bytes via a bus, whereupon each byte of input data is compared with each byte of the sought after sync marker pattern for each bit position 1 through 8 of the byte and an error count is generated. The error count for each bit position is added in the PIPEADD and compared with a preset error tolerance. If the error count is equal to the tolerance, a true sync marker pattern is indicated as being

received, whereupon the data and the sync marker pattern are sent to the window subsystem 80. If the error count is not equal to the error tolerance, a second query is made to determine if the inverter error count is equal to the error tolerance. If the answer is negative, the comparison step is repeated. If the inverted error count is equal to the tolerance, the inverted sync marker is inverted and sent to the window subsystem. See at least Col. 14, line 31 – Col. 15, line 8 and the Abstract of Ghuman.

Delfs discloses a method and apparatus for transporting tone signalling information through a GCME link in a GSM network. In a data stream to the local entrance to the GCME link, a tone signal to be transported is detected. The detected tone signal is coded into bits of a TFO or TRAU-like frame for sending through the GCME link, including setting bits to mark the frame as a containing tone signalling information and setting bits to identify the detected tone signal, whereby the tone signalling information is transported in-band through the GCME link as a marked TFO or TRAU-like frame. At the remote exit from the GCME link, the marked frame is detected and the tone signal regenerated in dependence upon the bits of the marked frame. See at least the Abstract of Delfs.

Applicant submits that the combination of Ghuman and Delfs does not teach or suggest the combination of features recited in the pending claims. The Office Action cited Col. 13, lines 20-35 of Ghuman as disclosing choosing a searching direction, as recited in the pending claims. However, the cited section of Ghuman merely discloses that the control block 346 responds to requests by a microprocessor via seven input

signals. There is no teaching in the cited section of Ghuman of choosing a searching direction, as recited in the pending claims.

Furthermore, the pending claims recite searching a first error bit starting from a chosen end of the searching block and counting a number of bit error from the first error bit in a slipped block. There is no teaching or suggestion in Ghuman of searching a first error bit starting from a chosen end of the searching block. As noted above, there is no teaching or suggestion in Ghuman of choosing a searching direction, as recited in the pending claims. There also is no teaching or suggestion of counting a number of bit error from the first error bit in a slipped block, as recited in the pending claims. In the citied section of Ghuman, each byte of input data is compared with each byte of the sought after sync marker pattern for each bit position 1 through 8 of the byte and an error count is generated, wherein the error count for each bit position is added in the PIPEADD and compared with a preset error tolerance and it is determined if the error count is equal to the tolerance. As disclosed in paragraphs 0012-0014 of the present invention, the slipped block is an adjacent block where expected bits have transferred into after the octet slip. There is no teaching or suggestion in Ghuman of a slip block or of counting a number of bit error from the first error bit in a slipped block, as recited in the pending claims.

There also is no teaching or suggestion in Ghuman of a slip detector that is arranged to detect assumed octet slip, as recited in claim 23. Ghuman does not teach or suggest octet slips. As disclosed in paragraph 0009 of the present invention, an octet slip is a situation in which a sequence of octets has slipped one octet forward or backward.

Delfs does not cure any of the deficiencies of Ghuman, as noted above. Therefore, Applicant respectfully asserts that the rejection under 35 U.S.C. §103(a) should be withdrawn because neither Ghuman nor Delfs, whether taken singly or combined, teaches or suggests each feature of claims 1, 12 and 23 and hence, dependent claims 2-11, 13-22 and 24-36 thereon.

Claim 35 was rejected under 35 U.S.C. 103(a) as being unpatentable over Ghuman in view of Delfs and further in view of U.S. Patent No. 6,487,198 to Pierson (hereinafter Pierson). According to the Office Action, Ghuman and Delfs do not teach arranging the slip detector in an in-path equipment. Therefore, the Office Action combined the teachings of Ghuman, Delfs and Pierson to yield all of the elements of claim 35. The rejection is traversed as being based on references that neither teach nor suggest the novel combination of features clearly recited in claims 35.

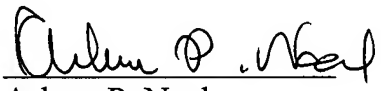
Claim 35 is dependent on claim 24 and thus incorporates all of the elements of claim 24. Neither Ghuman, Delfs nor Pierson teaches or suggest choosing a searching direction; searching a first error bit starting from a chosen end of the searching block and counting a number of bit error from the first error bit in a slipped block, as recited in claim 24 upon which claim 35 depends. Therefore, Applicant respectfully asserts that the rejection under 35 U.S.C. §103(a) should be withdrawn because neither Ghuman, Delfs nor Pierson, whether taken singly or combined, teaches or suggests each feature of claims 24 and hence, dependent claim 35 thereon.

As noted previously, claims 1-36 recite subject matter which is neither disclosed nor suggested in the prior art references cited in the Office Action. It is therefore respectfully requested that all of claims 1-36 be allowed and this application passed to issue.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, the applicant's undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, the applicant respectfully petitions for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,



Arlene P. Neal
Registration No. 43,828

Customer No. 32294
SQUIRE, SANDERS & DEMPSEY LLP
14TH Floor
8000 Towers Crescent Drive
Tysons Corner, Virginia 22182-2700
Telephone: 703-720-7800
Fax: 703-720-7802

APN:ksh

Enclosures: Petition for Extension of Time
Check No. 16712